

Amendments to the Claims

Claims 1-13 (Cancelled)

Claim 14 (Currently amended): A method of assaying for protease activity inside a cell, comprising:
introducing into a cell a nucleic acid construct having a sequence encoding an amino terminal portion of a green fluorescent reporter protein ~~fused~~ operably linked to a serine protease substrate sequence followed by a sequence encoding a carboxyl terminal portion of the green fluorescent reporter protein;
expressing the ~~recombinant fluorescent~~ serine protease substrate sequence in the presence of a protease;
detecting using fluorescence activated cell sorting (FACS) a change in quenching of fluorescence by cleavage in said serine protease substrate sequence, as wherein the change in quenching is an indication of protease activity.

Claim 15 (Currently amended): The method of claim 14 wherein the presence of a peptide bond between the amino and carboxyl-terminal fragment of the serine protease substrate sequence is essential to generate or maintain fluorescence.

Claims 16-19 (Cancelled)

Claim 20 (Currently amended): A method of assaying for protease activity inside a cell, comprising:
introducing into a cell a nucleic acid construct having a sequence encoding an amino terminal portion of a green fluorescent reporter protein ~~fused~~ operably linked to a NS3/4A serine protease substrate sequence that encodes a serine protease substrate followed by a sequence encoding a carboxyl terminal portion of the same green fluorescent reporter protein;
expressing the serine protease substrate sequence in the presence of a protease;

detecting using fluorescence activated cell sorting (FACS) a change in quenching of fluorescence by in said serine protease substrate sequence, ~~as wherein the change in quenching is an~~ indication of protease activity.

Claim 21 (Currently amended): The method of claim 20 wherein the presence of a peptide bond between the amino and carboxyl-terminal fragment of the serine protease substrate is essential to generate or maintain fluorescence.

Claims 22-23 (Cancelled)

Claim 24 (Currently amended): The method of claim ~~22~~ 20 wherein the NS3/4A is a mutant NS3/4A protease having ~~has~~ a serine converted to a glycine.

Claims 25-29 (Cancelled)